Vermont EMS Today

September 2000

From the Director

The New First Responder–Emergency Care Attendant

The Vermont EMS system is in the process of updating the curriculum used for training those entering this field at the ECA certification level. The curriculum update has implications for everyone in the system who trains, supervises, or encounters providers at the ECA level. This article is intended to provide an overview of what has changed and how the new First Responder–ECAs will fit into the system.

What is the New First Responder ECA Curriculum?

Vermont is now using the 1995 National Standard First Responder Curriculum leading to Vermont ECA certification. This program is a subset of the objectives of the National Standard EMT-Basic program. In the national hierarchy of training, this program is intended to prepare firefighters, police officers, lifeguards and others in similar roles. The curriculum is not designed to train entry-level EMS providers, although that is how we have chosen to use it in Vermont. Nationally, it is anticipated that trained First Responders will have little access to emergency care equipment and will need essential lifesaving skills for only a brief period until the arrival of an ambulance staffed with at least EMT-Basics. To differentiate between responders trained under the old ECA curriculum and those trained under the new, we are referring to new curriculum trainees as "First Responder–ECAs."

The program can be taught in approximately 45 hours, which reduces the training time barrier for people who are usually new EMS recruits.

Why have we chosen this curriculum? What other options were considered?

The First Responder curriculum is nationally recognized. There are text, audio-visual, and testing resources available to support it. The course is assessment based and provides a logical introduction for people moving towards EMT-Basic training. The program can be taught in approximately 45 hours, which reduces the training time barrier for people who are usually new EMS recruits.

Aside from this curriculum, Vermont had two other options for updating the ECA program. One possibility was to start with the new National Standard First Responder curriculum and add additional training to "Vermontize" it. While that approach was tempting, when we discussed the material that people wanted to add, the additional training came very close to being an EMT-Basic. Another option was to do away with the ECA level. That option was rejected because, overwhelmingly, EMS organizations have continued to identify a need for a locally deliverable, low cost, simple, introductory training curricula to use as a recruiting tool for new personnel.

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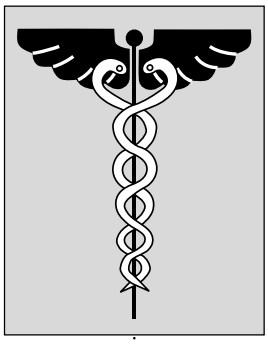
From The Medical Advisor

Being Prepared



There are many things that we train for on a frequent basis. Some of those things, like splinting and bandaging, we use often. Some things, like mass casualty drills, we hope we will never have to use in our lifetime. And then there are some things we have never been trained for that may become much more common; it is part of our job and we must remain flexible to work well in the system.

The severe flu season last winter took its toll on the healthcare industry. A large number of people become ill and incapacitated. Some of them became our patients. A few people, often at the extremes of age, were most severely affected and required hospital admission. Despite all efforts, some of them succumbed to their illness.

I wonder how many of you noted something a bit different this year. More than a few hospitals became full with patients and emergency departments overflowed. While this is not a common event in Vermont, it seems that the system was stressed to the maximum. This may become more of the norm.

We have become aware of hospital emergency departments where EMS could literally not turn over care of the patient for considerable periods of time as no bed and/or no staff existed to receive the patient. For nearly the first time that I can think of, rural Vermont saw hospitals notify their EMS providers that the emergency department was open and receiving patients, but that anyone requiring hospital admission would likely have to be transferred to another hospital. Indeed, at least one hospital suggested to its area EMS providers that if they encountered a patient who might possibly need admission to the hospital, that EMS might wish to explore alternate destination hospitals with the patient. Can you imagine that?!

How on earth can we "train" for this?

Suddenly, we find ourselves facing one of the greatest challenges possible, and we haven't even begun to think of how to "train" for this. If we even get into our usual destination hospital, there may be unanticipated waits before we can properly turn over the patient's care to the ED staff. Our run times extend and our service area may be affected.

The next call we get may find us suggesting to a patient that a trip to a more distant hospital, perhaps one to which the patient's doctor does not admit patients, may be their best avenue for immediate health care. Without question, those of us who would readily assist our patient by transferring him or her from the receiving ED to the admitting farther hospital will feel some effect from the added time requirements.

How on earth can we "train" for this?

While the precise answer to that question may not be known at this moment, I believe that we began to prepare for this eventuality when we changed to the new assessment-based curriculum. In moving to this new curriculum, our assessment-based approach allows us to work with area emergency departments and medical direction to match resources with patient needs; and our assessment counts!

It must be readily apparent that our ability, in the new healthcare scheme, to do a good patient assessment is key in deciding which patient needs urgent or emergent treatment in facilities that are stretched to the limit. It forms the foundation upon which to decide which patients might benefit from traveling to a different hospital than they (or even, we most often use.

Healthcare today is dynamic, I hope you agree. The changes we face will challenge us to be the strongest link in the system; it certainly acknowledges that we are the very important vanguard of the team. As we train, honing and refining our assessment skills, we offer the most valuable of services to our patients and the community. The consequences of our actions will be felt by all. I am excited about our role in healthcare today for it compels us to be the best that we can be for the patient's sake.

I know that Vermont EMS is equal to this challenge and I am convinced that we have not seen the last of it.

—Wayne J. A. Misselbeck, M.D.
State of Vermont Medical Advisor

Vermont EMS Today
is published as a service for Vermont's emergency medical providers. Suggestions, comments and news items are always welcome. Write or call Leo J. Grenon, Vermont Dept. of Health, 108 Cherry Street, Box 70, Burlington, VT 05402. (802) 863-7310 or 1-800-244-0911 (in Vermont only). Email: VTEMS@VDH.STATE.VT.US

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This publication can be obtained in other forms: 1-800-244-0911, 1-802-863-7310; ask for Leo Grenon. If you want to reprint articles from this or any Vermont EMS Today publication, please contact Leo Grenon at the above numbers.

From the Director—

The New First Responder

CONTINUED FROM PAGE 1

At the Health Department level, we hope that the First Responder–ECA level will be only a stopping point for providers on their way to becoming EMT-Basics.

What can First Responder-ECAs do?

Those certified under the new curriculum can function as the sole responder for a licensed First Responder service. First Responder-ECAs can function as one of two certified providers, along with an EMT-Basic in the patient compartment, to form a minimum legal ambulance crew. The new curriculum and VT ECA certification includes knowledge of and authorization for use of the following skills:

- First Responder assessment
- Personal safety measures
- CPR
- Bleeding control
- Airway management using oral and nasal airways
- Pocket mask and suction use
- Emergency patient lifts and carries
- Normal obstetrical deliveries
- Manual stabilization of neck injuries and extremity injuries

The new curriculum **does not include** training or authorization for:

- Oxygen or bag valve mask use
- Taking blood pressures
- Ongoing assessment techniques
- Spinal immobilization
- Splinting
- AED
- Medication administration
- Glucose administration

Who can teach the new First Responder–ECA curriculum?

Vermont EMS rules require that an EMT-Basic or higher certified person to teach this curriculum. Training coordinators in all EMS Districts have been oriented to assist EMTs in squads become familiar with the new curriculum and with the procedures for course approval, testing, etc.

How long is the certification?

Three years.

How can First Responder-ECAs advance to the EMT-Basic level?

First Responder–ECAs have two options for advancing their training to the EMT-Basic level.

First Responder–ECAs have two options for advancing their training to the EMT-Basic level:

1. Take and complete a full EMT-Basic course.
2. Take and complete a series of modules that include the material to bridge between that contained in the First Responder curriculum and that contained in the EMT-Basic curriculum.

How do the modules work?

There are six modules, each of which is a portion of an EMT-Basic course. A qualified EMT-Basic course coordinator must coordinate each module. As a person successfully completes each module, they gain the scope of practice associated with it. Accordingly, an EMS organization that needs new recruits able to do specific skills can establish its own entry level requirements as First Responder–ECA plus one or more modules.

What happens to people trained and certified under the old ECA curriculum?

ECAs trained under the previous curriculum may stay at that level as long as they choose to remain active, provided they continue to meet all the previously existing requirements for recertification. They may advance to the EMT-Basic level by taking an EMT-Basic course or by taking an EMT-Basic bridge course.

Why can't old curriculum trained ECAs take the modules?

The former curriculum for training ECAs was diagnosis based. Before those persons could go forward with the modules, they would need to have an orientation to the assessment based approach and other material similar to the EMT-Basic transition course that was used when the most recent EMT-Basic curriculum was introduced to existing EMTs. Given the relatively short length of the new First Responder curriculum, transitioning between the old and new levels is most practically accomplished by taking the course.

Where can I get additional information about the new First Responder–ECA program?

Speak with your District Training Coordinator or others within your EMS District who have been oriented to teach the new curriculum. You may also contact Dan Manz at the Vermont EMS office.

By Dan Manz, EMS Director

Toll-Free Number

Save yourself some money.

When calling EMS from within Vermont, use our toll free number:

1-800-244-0911

EMS Fax Number **1-802-863-7577**

Email **VTEMS@VDH.STATE.VT.US**

Vermont EMS, How May We Help You?

The Vermont EMS Office staff is anxious to help you with questions, technical assistance, problem solving or other needs. Our staff is not large and we need to work efficiently with many different groups in a number of different roles.

The following information is intended to help you reach the person in the EMS office who can provide you with the assistance you need.

The EMS Office has two phone numbers, 802-863-7310 or toll-free, 800-244-0911 anywhere in Vermont. Use the phone number that is most convenient from your location. After hours, you may leave a message on the answering machine.

The EMS Office has a 24-hour fax number, 802-863-7577. While the fax is a fast and easy way to transmit written communications, we generally need an original signed copy of most forms that have signature requirements.

All EMS Office staff have voice mail. When you call either of the main office numbers, an automated router will guide you by subject of interest or by staff member name to the person best able to help you. Please leave your name, phone number, the nature of your call, and a convenient time you can be reached so that staff can get back to you.

All EMS Office staff members have e-mail. The following is a list of our staff, their major customer service responsibilities, and their e-mail addresses:

Leo Grenon, *Business Manager*—Grants management, newsletter production, to request forms or patches, billing. *lgrenon@vdh.state.vt.us*

Donna Jacob, *Administrative Assistant*—EMS provider certifications, EMT-Basic reciprocity applications, ECA (old curriculum) testing and program support. *djacob@vdh.state.vt.us*

Dan Manz, *EMS Director*—Policy questions, EMS system issues, First Responder–ECA (new curriculum) program support, EMS rule questions, legal issues, EMS protocols, new projects. *dmanz@vdh.state.vt.us*

Wayne Misselbeck, MD, *EMS Medical Advisor*—Clinical matters, EMS District Medical Advisor support, hospital related EMS issues. *wmissel@vdh.state.vt.us*

After hours, you may leave a message on the answering machine.

Mike O'Keefe, *EMS Training Specialist*—General training questions, course approvals, test scheduling above the ECA level, instructor/coordinator support, EMT-I reciprocity, Combi-tube program. *mokeefe@vdh.state.vt.us*

Rob Schell, *EMS Operations Specialist*—Technical assistance to squads, annual vehicle inspections, EMS Webmaster, new EMS license processing, EMS license changes, hazardous materials issues, communications matters, quality of care complaints or investigations, criminal background checks. *rschell@vdh.state.vt.us*

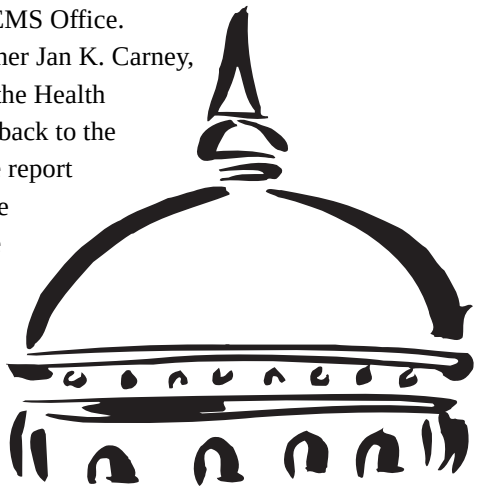
Vermont EMS also has a great website at: *www:state.vt.us/health/ems/* Check it out. Many forms can be ordered from the information page. There is lots of useful and interesting information. You can leave messages for office staff at the website as well.

—Dan Manz, EMS Director

Legislature Holds EMS Hearing

Earlier this spring, the Vermont Legislature's House Commerce Committee held a hearing on EMS issues. About 25 people presented testimony on a variety of issues ranging from EMS training and testing to the reception people get when contacting the Vermont EMS Office.

After the hearing, Commissioner Jan K. Carney, M.D. and Larry Crist, Director of the Health Protection Division made a report back to the House Commerce Committee. The report reflected the issues presented in the hearing and planned actions by the Department to address some of them.



Several people commented that customer service by the EMS Division has not met their expectations. Some described problems reaching the proper person in the office when they had a question. Delays in receiving certification cards was a problem for many who attended the hearing.

A detailed copy of the issues presented and the Department's response is available on the EMS website at: www.vt.state.us/health/ems Crist told the Committee that the Department is committed to quality service. A number of steps are being taken to improve the timely distribution of EMS certifications. An EMS Program Administrator position has been created to oversee internal procedures associated with the certification of EMS personnel, licensing of EMS organizations and other administrative matters.

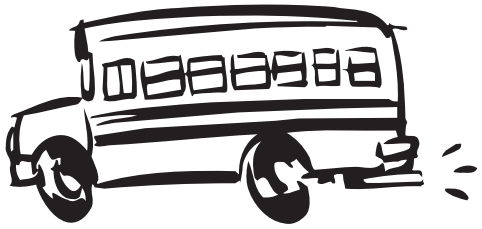
—Dan Manz, EMS Director

MARK YOUR CALENDAR!

2001 EMS

Conference

MARCH 31 & APRIL 1



Back to School

The end of the summer season heralds the return of children to schools. This means more school busses, bicycles, and pedestrians on the roadways.

As EMS providers, let's set a good example for the driving public in our behaviors behind the wheel. We can be role models for safe behaviors and make a public statement to the communities we serve through our EMS and personal driving habits.

When responding to an emergency call or transporting a patient in a non-emergency situation:

- Be careful with speed. Rarely does the few seconds gained by increasing driving speed change the outcome of a patient.
- Be visible. Drive with your headlights on even in non-emergency situations.
- Wear your safety belts. Make sure everyone in the ambulance is restrained.
- School busses have the right of way. Even in an emergency situation with a vehicle displaying lights and siren, you may not pass a stopped school bus with its red lights flashing.
- Drive courteously. Observe all traffic laws and give other drivers a break when you can.
- Be careful backing up. Look behind the ambulance before backing and use a spotter whenever possible.

Have a safe autumn and we look forward to seeing you at the 2001 EMS Conference this spring!

—Leo J. Grenon,
Business Manager, EMS State Office

What's Spreading in Infectious Disease

Toll-Free Hotline For Clinicians Treating Exposure To Bloodborne Pathogens

The U.S Department of Health and Human Services has a national toll-free hotline to help clinicians counsel and treat health care workers with job-related exposure to bloodborne diseases and infections, including hepatitis and HIV infection.

By calling 1-888-448-4911 from anywhere in the United States 24 hours a day, clinicians can gain access to the National Clinicians' Post-Exposure Prophylaxis Hotline (PEPline). The PEPline has trained physicians prepared to give clinicians information, counseling and treatment recommendations for workers who have needle-stick injuries and other serious occupational exposures to bloodborne microorganisms that lead to such serious infections or diseases as HIV or hepatitis.

The full text of the news release is available at *www.dhhs.gov.*

On-Line Journal No Longer Available Free of Charge

The American Journal of Infection Control, an online source of information about infectious diseases, is no longer available free of charge. Readers may gain access to tables of contents and abstracts, but will have to purchase a subscription or pay a fee for each article to get full text access. The journal's address is www.apic.org/ajic.

Risk of Infectious Disease from CPR Extremely Low

Researchers at the University of Wisconsin who reviewed the medical literature have come to the conclusion that infections from performing cardiopulmonary resuscitation (CPR) are extremely rare. In fact, only 15 cases of infection acquired through CPR have ever been reported. "Most of these cases involved a bacterial pathogen, such as Neisseria meningitidis. Transmission of hepatitis B virus, hepatitis C virus, or cytomegalovirus during CPR has not been reported," according to the article in Annals of Internal Medicine. There were three reported cases of HIV infection acquired during resuscitation of an infected patient, but all resulted from "high-risk cutaneous exposures," not mouth-to-mouth resuscitation or other forms of positive pressure ventilation. The researchers found no reports of infection acquired during CPR training.

Although it might have been more reassuring if the authors had found no infections at all, EMS providers can take comfort in the fact that millions of patients have received CPR and only 15 cases of infection could be found. Even more reassuring is the realization that the most feared diseases, hepatitis C and HIV, which have little or no treatment, are not being passed to rescuers in this manner.

The authors conclude, "The benefit of initiating lifesaving resuscitation in a patient in cardiopulmonary arrest greatly outweighs the risk for secondary infection in the rescuer or the patient. Nevertheless, use of simple infection-control measures during CPR and CPR training can reduce a very low level of risk even further."

More information is available in the report: Mejicano GC, Maki DG. Infections acquired during cardiopulmonary resuscitation: estimating the risk and defining strategies for prevention. *Ann Intern Med* 1998 Nov 15;129(10):813-28.

There were three reported cases of HIV infection...

Information on Prevention of Meningococcal Disease Available from CDC

Meningococcal disease is uncommon, but according to the Centers for Disease Control and Prevention (CDC), up to 3,000 cases occur each year in the United States, with only a few (less than a dozen) cases occurring in Vermont. According to a recent issue of Morbidity and Mortality Weekly Reports, about 10 percent of the patients who become ill will die from the disease. Approximately 10 percent suffer complications such as neurologic disability and hearing loss.

The group most at risk for infection is infants less than one year of age, but people 18 to 23 years of age are also at higher risk than the general population.

Fortunately, a health care worker who has had a close contact with an infected person can reduce the probability of becoming ill by taking an appropriate antibiotic. Close contact in the context of health care delivery means direct exposure to the patient's oral secretions through such procedures as mouth-to-mouth resuscitation, endotracheal intubation, or endotracheal tube management. Close contact does not mean just being in the same ambulance with the patient. According to the CDC, the risk of illness for household contacts exposed to patients who have meningococcal disease is 500 to 800 times greater than for the total population. EMS providers who have sustained close contact with a patient who has symptoms suggestive of meningococcal disease are therefore wise to notify their designated officer (DO) for infection control. The DO will then consider the need for consultation with a physician knowledgeable in these matters. It may be reassuring to know that the Ryan White CARE Act, a federal law that protects emergency workers in

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The Vermont EMS Web Site - and You

http:// www.state.vt.us/ health/ems

For the past two years the VT EMS web site has been steadily growing to meet the expanding needs of Vermont's EMS providers. The intent of the site is to provide the greatest customer service 24 hours a day. Below is a listing and explanation of the many (but not all!) features of the VT EMS web.

In the News

This section lists important state announcements and recall bulletins relevant to EMS providers.

EMS Agency & District Information

If you are looking for a service within Vermont select here to find it. You may also link to the District Chairperson, Training Coordinator and Medical Advisor from here.

EMS Today Newsletter

For the past few years the *EMS Today* newsletter has been available in electronic format. Select here for the most recent issue.

Licensing and Certification

When it comes to certifications there are many questions and issues. This page will provide many of the answers you're seeking.

Vermont EMS Conference

The Vermont EMS conference is held every Spring. Check here for information on next year's conference, and the most recent EMS awards winners.

Exam Calendar

Need to test? This page gives you the most up-to-date calendar of exam sessions including exam coordinators, e-mails and phone numbers.

Web Search

If you're not sure what you're looking for try this search option by typing in the key word.

Directory of State EMS Offices

Looking for another state's EMS requirements? Here is the place to start.

EMSC Program

Vermont's Emergency Medical Services for Children project has been at work for several years. Select here for several links to EMSC programs.

Directions to VT EMS

Need to come to the office? Select here to find your way.

Request Information

If you need a form or have a question, select here and find what you need. You can also download some EMS documents here as well.

EMS Week information

Each year we acknowledge National EMS week. Select here to find out the latest.

Staff Information

Select here to contact the Vermont EMS staff.

EMS Links

Many useful links have been added to this page. Surf here to pursue your special EMS interest.

The EMS web is constantly being expanded. Soon it will feature many of the forms needed to apply for Vermont exams, licenses and certifications. If you have any suggestions for the EMS web site please feel free to let me know at *VTEMS@vdh.state.vt.us.*

—Robert Schell,
EMS Webmaster

What's Spreading in Infectious Disease

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areas of infectious disease, requires a hospital to notify the ambulance that transported a patient with meningococcal disease within 48 hours of the diagnosis.

Because an exposed person is at highest risk during the first few days after exposure, he or she should receive chemoprophylaxis as soon as possible (ideally within 24 hours after identification of the illness). An antibiotic administered more than 14 days after onset of illness in the index patient is probably of little or no value. Rifampin, ciprofloxacin, and ceftriaxone are all 90 to 95 percent effective in eliminating the offending bacterium and are all acceptable for chemoprophylaxis.

For more information, see the report, "Prevention and Control of Meningococcal Disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP)." It is available at the CDC's web site: *www.cdc.gov/epo/mmwr/preview/mmwrhtml/rr4907a1.htm*

—Mike O'Keefe,
Training Coordinator

2000 EMS Conference

April of this year saw the usual festive gathering at the Sheraton in South Burlington for the annual Vermont EMS Conference. About 700 EMS providers attended the numerous educational sessions and vendor displays. According to conference evaluations, participants were especially impressed by the keynote speakers. Dr Phil Brown, director of the emergency department at Central Vermont Medical Center and District 6 medical advisor, opened the conference with his entertaining and often touching reflections on what patients had taught him in his career in health care. Baxter Larmon, PhD, associate professor at the UCLA Center for Prehospital Care and the final speaker, sent people out the door with smiles on their faces after his talk about the initial approach to patients. Unfortunately, he and Katherine West, RN, CIC, had to spend an additional night in Vermont because of the foot of snow that fell the last day of the conference. Although Baxter missed his award presentation for the teacher of the year at the UCLA medical school, he and Kathy both got home safe and sound.

Presentations for next year's conference (March 30–April 1) are already being considered. Anyone with a suggestion should let the EMS Office know.

On-Line Journals

EMS providers wishing to see the latest medical research can often do so now through the world wide web. The *British Medical Journal* provides full free access to its articles at www.bmj.com. The *New England Journal of Medicine* provides free access to tables of contents and abstracts. The full text of articles is available only to subscribers at *www.nejm.org/content/index.asp.* The *Journal of the American Medical Association* has provided full free access to its articles at *jama.ama-assn.org* for some time, but has announced plans to limit free access to just tables of contents and abstracts in the near future.

Annals of Emergency Medicine provides free access only to tables of contents and abstracts, but if you know a physician who is a member of the American College of Emergency Physicians, the physician can get free access to the full text of articles at *www1.mosby.com/scriptsom.dllserve?action=searchDB&searchDBfor=home&id=EM.*

Prehospital Emergency Care provides full free access to its articles at *www.hanleyandbelfus.com/journals/pec.html.*

AED Data

If your service participated in the automated external defibrillation (AED) pilot project, don't be surprised if you get a letter and a phone call requesting some information. The EMS Office is attempting to put the data from the project together. Although we have a rough idea of the success of the program, we need to get the exact numbers if we are going to show others how a small rural state can make a difference.

EMT-B Transition Courses

Virtually all EMT-Bs have now had either a 1994 curriculum EMT-B course or a transition course. For those very few EMTs whose certifications lapsed and who wish to renew their certifications but have not had transition courses, there is a new option. Such people may take an approved EMT-B refresher course to fulfill the requirement for a transition course.

Anyone interested in this option should contact the EMS Office.

EMT-Intermediate Exam Revised

The EMT-Intermediate written examination went through some minor revisions this spring to reflect current standards and practices. Where there was a conflict between the 1984 curriculum and current practice, questions were changed so that students would not be caught in the middle trying to decide what is "right." The most glaring example of this was the choice of IV fluid for cardiac patients. Students will no longer have to decide whether they should give 5% dextrose in water (D5W) as the curriculum said, but which is no longer done in the field.

Additionally, a number of typographical errors were corrected and a few questions were revised or removed that were based on the old diagnosis based

approach and that students could no longer be held responsible for knowing.

The scope and depth of the material covered in the exam did NOT change. The material covered is the same as before; the objectives for the course remain the student's best guide for determining what to study.

EMT-Intermediate Curriculum

As described in the December 1999 issue of *Vermont EMS Today*, the National Highway Traffic Safety Administration has released an extensively revised national standard EMT-Intermediate curriculum. There are many changes in the course, including greater length (300-400 hours), more interventions (e.g., first line cardiac medications) and greater need for clinical facilities and field internships.

Since Vermont is not required to use the national standard EMT-Intermediate curriculum, there are many questions to consider: Should Vermont adopt the entire curriculum or adapt it to meet Vermont's needs and resources? What is the potential benefit to patients? What is the potential harm to patients? Who would be qualified to teach such a course? Who would have the time to take it? Where would students get the clinical exposure they need? Where would students get the field internships they need? Would district medical advisors support it, with its increased demand for physician involvement in teaching and course oversight? Would the emergency physician community support it, with its increased demand for on-line medical direction? Would all existing EMT-Is be able to attend update courses to get the new material? Would adoption lead to wider availability of advanced life support in Vermont or expansion of interventions for a much smaller number of providers?

Vermont EMS Office staff will meet in the near future with district chairs, trainers and medical advisors to consider these and other questions. These are serious issues with implications for many members of the EMS and health care communities. The EMS community will need to consider carefully what changes we wish to make and how to go about implementing them.

Testing

A reminder to instructors and district officials: There must be 25 or more candidates for the EMS Office to proctor an exam at the EMT-B level or higher. Once each fiscal year (July 1 to June 30), a district may request an exam for a group smaller than 25. Once the EMS Office has approved an exam, the district provides evaluators and equipment, and the Department provides the proctor, written exams and practical exam score sheets. The EMS Office also conducts (at the request of districts) three hour evaluator training sessions where EMTs who would like to become evaluators get an opportunity to learn about evaluating and then practice doing so on simulated candidates.

Instructor Development

At least one more EMS Instructor course will took place this fiscal year. District Boards should consider early who they wish to recommend so that when the dates and location are confirmed, the district can refer to its priority list of candidates and determine who is available to attend.

The purpose of the EMS instructor course is to prepare EMTs to coordinate courses at the EMT-B level and above. It is not a means of improving clinical skill levels or preparing training officers. The investment of time and energy a candidate must devote to the course is significant, so those who intend to teach at the EMT-B or EMT-I level are probably better initial choices than those who plan to teach only at the first responder level.

—Mike O'Keefe,
Training Coordinator

Number of people holding Vermont EMS certification as of 6/30/00:

ECA		801
EMT–Basic	(does not include advanced levels)	1157
EMT–I		726
EMT–P		78
Total EMTs at all levels:		**1,961**

ADVANCED AIRWAY MANAGEMENT:

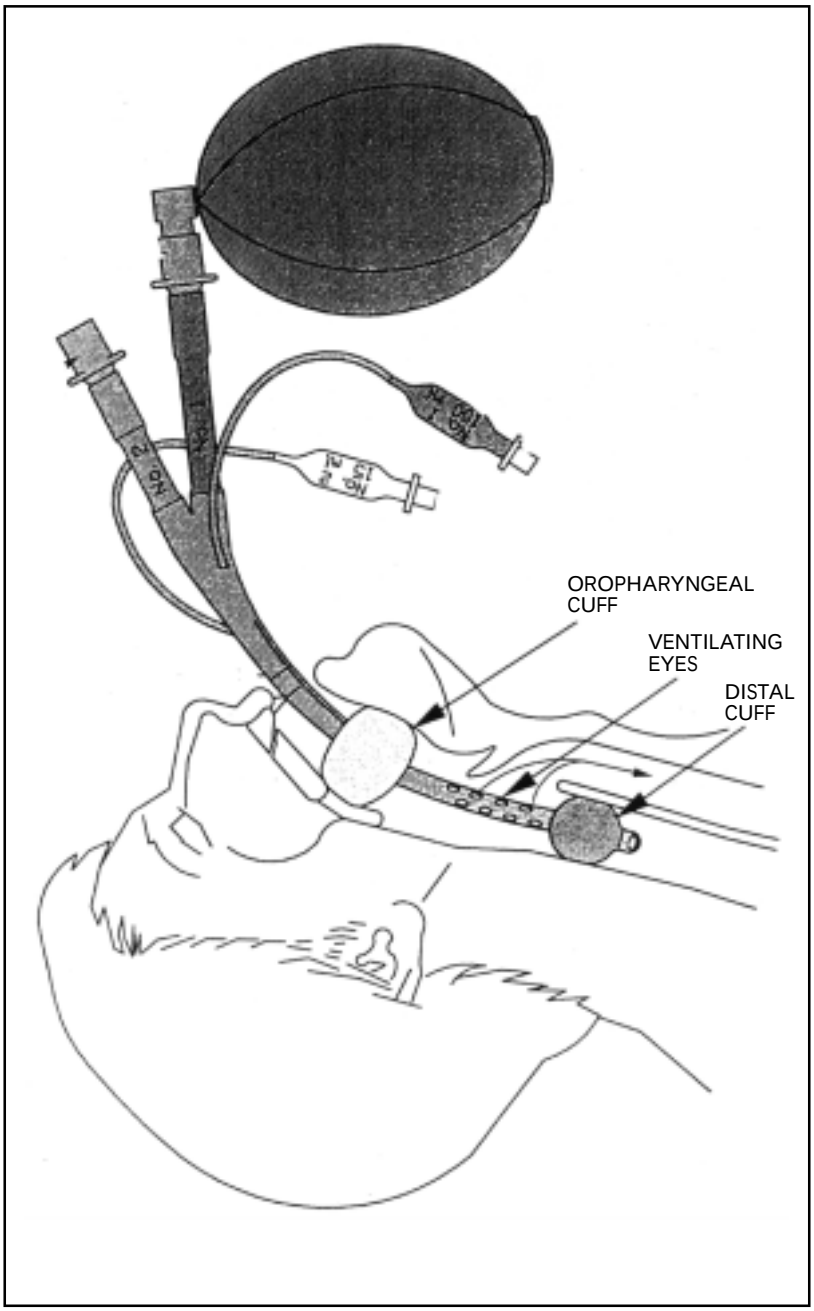
Is the Esophageal Tracheal Combitube® the Way to Go?

Vermont EMS has begun a pilot project to evaluate the Combitube® in order to determine its suitability for use by EMT-Intermediates in ventilating the patient who is not breathing. Because there are few studies regarding field use of the device, EMS is taking a graduated approach to implementation. Two districts have recently received the necessary training and have started using the Combitube® instead of the Esophageal Obturator Airway (EOA). If the Combitube® fulfills its promise, it will become a part of the EMT-Intermediate course.

What is the Combitube®?

The dual lumen design of the Combitube® is one of those ideas that seems extremely obvious once someone suggests it. The Combitube® has two channels—or lumens—in the tube that is inserted into the mouth of a patient who is not breathing (see figure). If, as usually happens, the tube goes into the esophagus, the provider ventilates the patient through the first tube (conveniently labeled tube number one). If attempts to ventilate through tube number one are not successful, the provider ventilates through the other lumen (conveniently labeled tube number two), which allows air to go directly into the trachea. Because there is a cuff in the mouth that prevents leakage of air, the rescuer does not need to seal a mask on the patient's face. Since obtaining a mask seal is often difficult in the field, this feature is possibly the most appealing characteristic of the device.

Two other devices have attempted to make this simple idea a reality. The first was the Pilcher or Vermont modification of the EOA. David Pilcher, MD, who was director of the emergency department at the Medical Center Hospital of Vermont in the 1970s, was apparently the first to come up with the idea many years ago. After a hospital patient died from injury to his esophagus caused by failure to deflate an over-inflated EOA cuff, he suggested cutting the tube on an existing EOA and putting an endotracheal (ET) tube on the remaining segment. The low pressure cuff of the ET tube would prevent another incident like the one he had seen. Additionally, in the unlikely event the tube went into the trachea, the provider would be able to remove the mask and ventilate the patient directly through the tube. EMS agencies in the Chittenden County area tried the device in the 1980s, but eventually gave it up, primarily because of problems keeping the ET tube attached to the mask.



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Another dual lumen airway device, this one commercially manufactured, became available in the 1990s. This device, the Pharyngeal Tracheal Lumen® (PTL) airway, was eventually taken off the market because of frequent failure of the cuff in the mouth.

How is EMS implementing the Combitube®?

The approach EMS is taking to implement the device is very similar to that used for automated defibrillation. EMS agencies, hospitals, medical directors and EMT-Intermediates all read and sign agreements describing their responsibilities. EMS staff conducts the course in cooperation with the district medical advisor and local instructional staff. After each use or attempted use of a Combitube®, the EMT-I who used it completes a data collection form and turns the form over to the receiving physician. The doctor completes the second half of the form and sends it to EMS, where the information is entered into a database.

When a sufficient number of uses have occurred, EMS will compile the results and discuss with district medical advisors and other officials. If the results are satisfactory, EMS will begin the process to make Combitube® use a part of the EMT-Intermediate course. If there are problems, we will re-evaluate the training or the device to see if improvements can be made to overcome the identified problems.

What is the course like?

A Combitube® course typically takes place in two three-hour sessions conducted on two evenings a week apart. The first evening begins with a review of basic life support airway techniques. An EMT-I is allowed to continue in the course only after demonstrating competence in the skills of suctioning, two person BVM ventilation and insertion of oral and nasal airways.

Students then learn about the Combitube® and practice using it on a manikin.

In the second session, students continue practicing with the Combitube® and also go over communication and documentation. There is also a discussion of difficult situations with plenty of opportunity for students to ask questions. The second session concludes with a written and practical exam.

Prerequisites

To enroll in the course, a student must meet all of these requirements:

- Current certification as a Vermont EMT-Intermediate (graduates of EMT-I courses who are retesting a failure are not eligible until they have passed the exam and become certified as EMT-Is; out-of-state EMT-Is are not eligible until they are Vermont-certified); and
- Affiliation with a service licensed in Vermont at the EMT-Intermediate level or higher; the service must be approved by the district medical advisor and must also agree to submit data for the purpose of evaluating the program; and
- Approval to participate from the district medical advisor for the individual EMT-I .

Course Completion Requirements

To complete the course and be authorized to use the Combitube®, an EMT-I must:

- attend all of both sessions;
- demonstrate competence in BLS airway management skills;
- demonstrate proper technique in inserting the Combitube® during the course at least five times;
- complete the take-home quiz;
- pass the written examination based on the objectives for the course;
- pass the practical examination based on the skill sheet in the student packet;
- meet any other requirements of the district medical advisor.

If there are problems, we will re-evaluate the training or the device to see if improvements can be made to overcome the identified problems.

How does a service get Combitube® training for its EMT-Intermediates?

The EMS Office is slowly expanding this intervention to more and more areas of the state. District 5 (the St. Johnsbury area) and District 6 (the Barre-Montpelier area) have had several courses. More courses are scheduled for Districts 6, 7 (Middlebury-Bristol area) and 8 (Randolph area). Because so many courses are occurring in the next few months, other districts wishing to get involved should plan to begin no sooner than the fall or winter. This should provide ample time to find two nights (separated by **at least** one night, preferably one week) when the Project Medical Director and a service's EMT-Is are all available.

An application packet includes a Service Agreement, a Local Project Medical Director Agreement, a Hospital Agreement and several copies of the EMT-I Agreement. The course application lists the equipment the district or service needs to provide for the course (intubation manikins, Combitubes®, etc.). Both are available from the EMS Office.

What happens after the course is over?

After the course is over, EMS staff score the examinations and generate certificates of completion. The squad receives a list of EMT-Is qualified to use the Combitube® and certificates of completion for successful students within two weeks. Students do not receive new EMT cards since this is a demonstration project, not a new certification level. This also reduces the processing time significantly.

—Mike O'Keefe,
Training Coordinator

File Update

Have you moved or changed your phone number or name since the last time you certified or recertified? Let us know se we can keep our records up-to-date.

Change of name and address form:

OLD INFORMATION:	NEW INFORMATION:
Name _____	Name _____
Address _____	Address _____
_____ Zip _____	_____ Zip _____
Phone _____	Phone _____
Certification number _____	

Send to: Vermont Dept. of Health, Division of Health Protection
EMS & Injury Prevention
P.O. Box 70, 108 Cherry Street
Burlington, VT 05402

Vermont Emergency Medical Services

108 Cherry Street
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802-863-7310
1-800-244-0911
(within Vermont)